IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of: Nichols	)	
	)	Group Art Unit: 2129
Serial No.: 09/868,664	)	
	)	Examiner: Coughlan, Peter D
Filed: September 26, 2001	)	
	)	Attorney Docket No: 005222.00161
For: A Runtime Program Analysis Tool for a Simulation Engine	)	

BRIEF ON APPEAL

Mail Stop: Appeal Brief-Patents
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 41.37, Appellants submit this Appeal Brief to the Board of Patent Appeals and Interferences in response to the Final Office Action mailed on May 11, 2007 and the Advisory Action mailed on July 18, 2007. A Notice of Appeal was timely filed on August 7, 2007. Please charge any necessary fees in connection with this Appeal Brief to Deposit Account No. 19-0733.

I. Real Parties in Interest

The real party in interest is ACCENTURE GLOBAL SERVICES GMBH.

II. Related Appeals and Interferences

Appellants are unaware of any appeals or interferences related to the subject appeal.

III. Status of the Claims

Claims 1-21 are pending and are found in the Appendix. Claims 1-21 stand rejected. No claims have been allowed.

Claims 1-21 are being appealed.

IV. Status of Amendments

No amendment after final rejection has been filed.

V. Summary of the Invention

An embodiment is directed to computer-implemented methods, apparatuses, and computer-readable medium for supporting a rule based expert training system. (Page 1, lines 30-39.) The training system offers a simulated environment to the user providing the user with a cognitive educational experience. The following description summarizes the invention and is subsequently followed by the specific descriptions of the independent claims 1, 10, and 19 (labeled as "**Description of Independent Claims**").

Embodiments of the invention may incorporate a personal computer such as an IBM compatible personal computer, Apple Macintosh computer or UNIX based workstation. (Page 3, lines 1-14.) A representative hardware environment is depicted in Figure 1 (as shown below), which illustrates a typical hardware configuration of a workstation in accordance with a preferred embodiment having a central processing unit 110, such as a microprocessor, and a number of other units interconnected via a system bus 112. The workstation shown in Figure 1 includes a Random Access Memory (RAM) 114, Read Only Memory (ROM) 116, an UO adapter 118 for connecting peripheral devices such as disk storage units 120 to the bus 112, a user interface adapter 122 for connecting a keyboard 124, a mouse 126, a speaker 128, a microphone 132, and/or other user interface devices such as a touch screen (not shown) to the bus 112, communication adapter 134 for connecting the workstation to a communication network (e.g., a data processing network) and a display adapter 136 for connecting the bus 112 to a display device 138. The workstation typically supports an operating system such as the Microsoft Windows NT or Windows/95 Operating System (OS), the IBM OS/2 operating system, the MAC OS, or UNIX operating system.

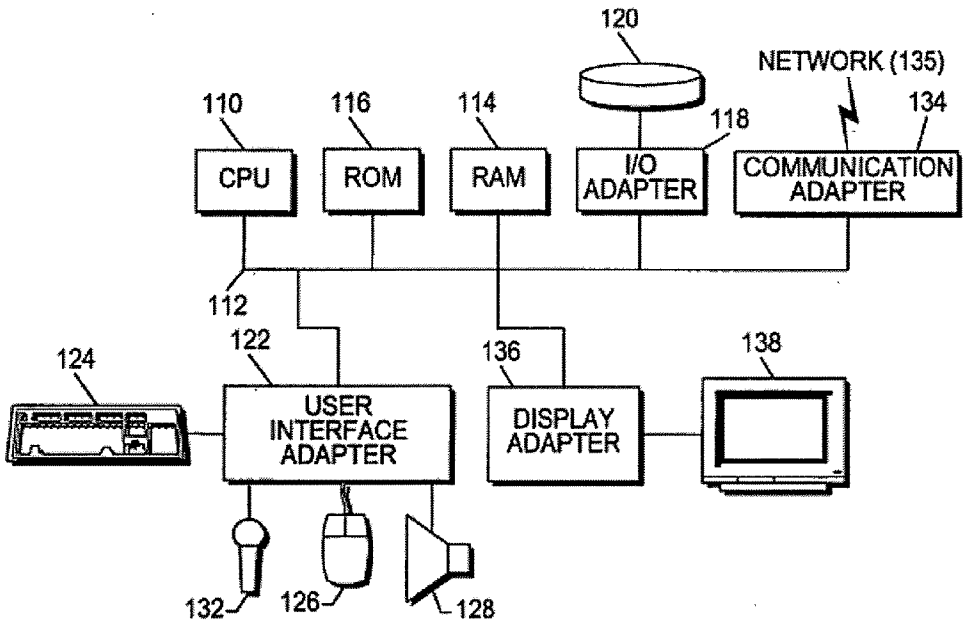

FIGURE 1

Embodiments of the invention may be written using JAVA, C, and the C++ language and utilizes object oriented programming methodology. (Page 3, lines 14-23.) Object oriented programming (OOP) has become increasingly used to develop complex applications. As OOP moves toward the mainstream of software design and development, various software solutions require adaptation to make use of the benefits of OOP. A need exists for these principles of OOP to be applied to a messaging interface of an electronic messaging system such that a set of OOP classes and objects for the messaging interface can be provided. A simulation engine in accordance with a preferred embodiment is based on a Microsoft Visual Basic component developed to help design and test feedback in relation to a Microsoft Excel spreadsheet. These spreadsheet models are what simulate actual business functions and become a task that will be performed by a student The Simulation Engine accepts simulation inputs and calculates various outputs and notifies

the system of the status of the simulation at a given time in order to obtain appropriate feedback.

The simulation model executes the business function that the student is learning and is therefore the center point of the application. (Page 3, lines 25-31.) An activity layer allows the user to visually guide the simulation by passing inputs into the simulation engine and receiving an output from the simulation model. For example, if the student was working on an income statement activity, the net sales and cost of goods sold calculations are passed as inputs to the simulation model and the net income value is calculated and retrieved as an output. As calculations are passed to and retrieved from the simulation model, they are also passed to the Intelligent Coaching Agent (ICA). The ICA analyzes the Inputs and Outputs to the simulation model and generates feedback based on a set of rules. This feedback is received and displayed through the Visual Basic Architecture.

Figure 2 (as shown below) is a block diagram of a system architecture. (Page 3, line 32- page 4, line 4.) The Presentation layer 210 is separate from the activity layer 220 and communication is facilitated through a set of messages 230 that control the display specific content topics. Embodiments of the invention enable knowledge workers 200 and 201 to acquire complex skills rapidly, reliably and consistently across an organization to deliver rapid acquisition of complex skills. Individuals are placed in a simulated business environment that looks and feels like real work, and challenges them to make decisions which support a business' strategic objectives utilizing highly effective learning theory (e.g., goal based learning, learn by doing, failure based learning, etc.), and the latest in multimedia user interfaces, coupled with three powerful, integrated software components.

The first of these components is a software Solution Construction Aid (SCA) 230 consisting of a mathematical modeling tool 234 which simulates business outcomes of an individual's collective actions over a period of time. The second component is a knowledge system 250 consisting of an HTML content layer which organizes and presents packaged knowledge much like an online text book with practice exercises, video war stories, and a glossary. The third component is a software tutor 270 comprising an artificial intelligence engine 240 which generates individualized coaching messages based on decisions made by learner.

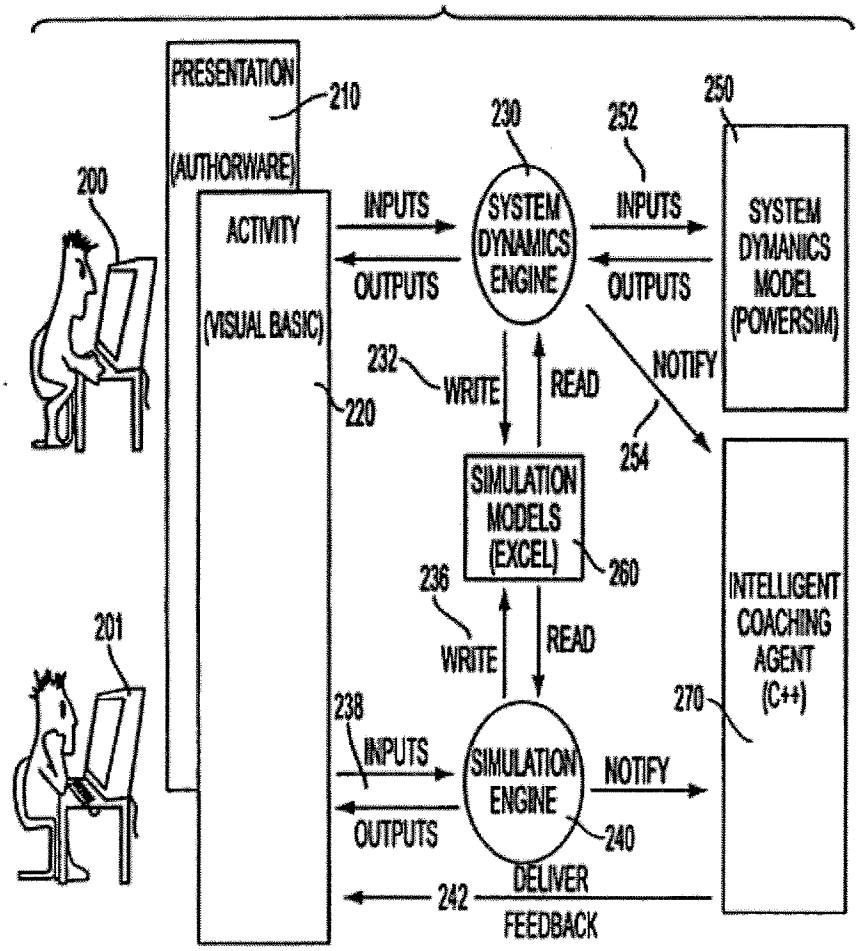

FIG. 2

Feedback is unique for each individual completing the course and supports client cultural messages 242 designed into the course. (Page 4, lines 5-12.) A business simulation methodology that includes support for content acquisition, story line design, interaction design, feedback and coaching delivery, and content delivery is architected into the system in accordance with a preferred embodiment. A large number of pre-designed learning interactions such as drag and drop association of information 238, situation assessment/action planning, interviewing (one-on-one, one-to-many), presenting

(to a group of experts/executives), metering of performance (handle now, handle later), time jumping for impact of decisions, competitive landscape shift (while time jumping, competitors merge, customers are acquired, etc.) and video interviewing with automated note taking may also be included.

The business simulation delivers training curricula in an optimal manner. (Page 4, lines 13-18.) Applications may provide effective training that mirrors a student's actual work environment. The application of skills relevant to on-the-job facilitates increased retention and higher overall job performance. While the results of such training applications are impressive, business simulations are very complex to design and build correctly. These simulations are characterized by a very open-ended environment, where students can go through the application along any number of paths, depending on their learning style and prior experiences and knowledge. A category of learning approaches called Learn by Doing, is commonly used as a solution to support the first phase (Learn) of the Workforce Performance Cycle. However, it can also be a solution to support the second phase (Perform) of the cycle to enable point of need learning during job performance. By adopting the approach presented, some of the benefits of a technology based approach for building business simulation solutions which create more repeatable, predictable projects resulting in more perceived and actual user value at a lower cost and in less time are highlighted.

Aspects of the invention focus on reducing the total effort required for development through reuse, which may decrease cost and development time. (Page 6, line 36- page 7, line 5.) The first step in considering reuse as an option is the identification of common aspects of the different Business Simulation (BusSim)

applications that can be generalized to be useful in future applications. In examination of the elements that make up these applications, three common aspects emerge as integral parts of each: Interface, Analysis and Interpretation. Every BusSim application must have a mechanism for interaction with the student. The degree of complexity of each interface may vary, from the high interactivity of a high-fidelity real-time simulation task, to the less complex information delivery requirements of a business case background information task. Regardless of how sophisticated the User Interface (Ul) it is a vital piece of making the underlying simulation and feedback logic useful to the end user. ' Every BusSim application does analysis on the data that defines the current state of the simulation many times throughout the execution of the application. This analysis is done either to determine what is happening in the simulation, or to perform additional calculations on the data which are then fed back into the simulation. For example, the analysis may be the recognition of any actions the student has taken on artifacts within the simulated environment (notebooks, number values, interviews conducted, etc.), or it may be the calculation of an ROI based on numbers the student has supplied. Substantive, useful feedback is a critical piece of any BusSim application. It is a important mechanism to communicate if actions taken by the student are helping or hurting them meet their performance objectives. The interpretation piece of the set of proposed commonalties takes the results of any analysis performed and makes sense of it. It takes the non-biased view of the world that the Analysis portion delivers (i.e., "Demand is up 3%") and places some evaluative context around it (i.e., "Demand is below the expected 7%; you're in trouble!", or "Demand has exceeded projections of 1.5%; Great job!").

Embodiments of the invention implement unique aspects of BusSim applications using a component approach rather than a framework approach. (Page 8, lines 20-26.) Components are combined with an application framework and an application architecture to achieve maximum reuse and minimum custom development effort. The Application Architecture is added to provide communication support between the application interface and the components, and between the components. This solution has the following features: The components encapsulate key BusSim functionality. The Application Architecture provides the glue that allows application-to-component and component-to-component communication. The Application Framework provides structure and base functionality that can be customized for different interaction styles. Only the application interface must be custom developed.

With a combined component/framework approach, high quality BusSim solutions may be delivered at a lower cost. (Page 8, lines 28-40.) Given that there are a number of third party frameworks already on the market that provide delivery capability for a wide variety of platforms, the embodiments of the invention may focus on defining and developing a set of components that provide unique services for the development and delivery of BusSim solutions. These components along with a set of design and test workbenches are the tools used by instructional designers to support activities in the four phases of BusSim development referred as the Business Simulation Toolset. A Component can be thought of as a black box that encapsulates the behavior and data necessary to support a related set of services. It exposes these services to the outside world through published interfaces. The published interface of a component allows you to understand what it does through the services it offers, but not how it does it. The

complexity of its implementation is hidden from the user. The following are the key components of the BusSim Toolset:

- Domain Component - provides services for modeling the state of a simulation.
- Profiling Component - provides services for rule-based evaluating the state of a simulation.
- Transformation Component - provides services for manipulating the state of a simulation.
- Remediation Component - provides services for the rule-based delivering of feedback to the student

The Domain Model component is the central component of the suite that facilitates communication of context data across the application and the other components. (Page 8, line 40 – page 9, line 8.) It is a modeling tool that can use industry-standard database such as Informix, Oracle, or Sybase to store its data. A domain model is a representation of the objects in a simulation. The objects are such pseudo tangible things as a lever the student can pull, a form or notepad the student fills out, a character the student interacts with in a simulated meeting. They can also be abstract objects such as the ROI for a particular investment, the number of times the student asked a particular question. These objects are often called entities. Some example entities include: Vehicles, operators and incidents in an insurance domain; Journal entries, cash flow statements and balance sheets in a financial accounting domain and consumers and purchases in a marketing domain.

An entity can also contain other entities. For example, a personal bank account entity might contain an entity that represents a savings account. (Page 9, lines 9-15.)

Every entity has a set of properties where each property in some way describes the entity. The set of properties owned by an entity, in essence, define the entity. Some example properties include: An incident entity on an insurance application owns properties such as "Occurrence Date", "Incident Type Code", etc. A journal entry owns properties such as "Credit Account", "Debit Account", and "Amount"; and a revolving credit account entity on a mortgage application owns properties such as "Outstanding Balance", "Available Limit", etc. Figure 4 (as shown below) illustrates a small segment of a domain model for claims handlers in the auto insurance industry in accordance with a preferred embodiment.

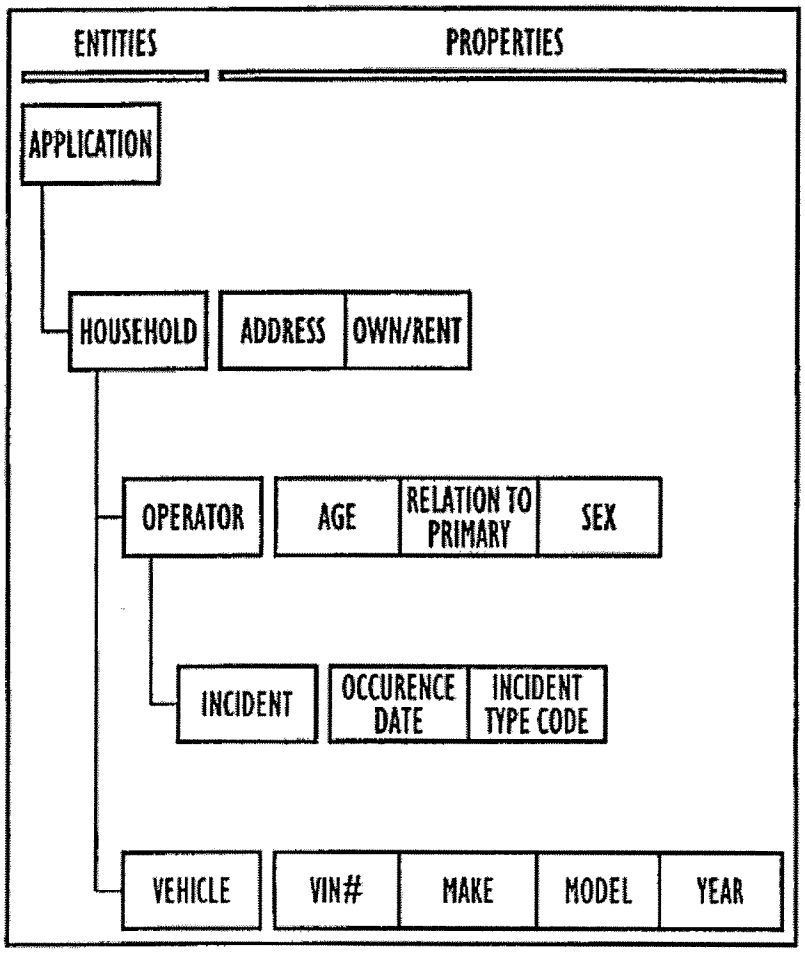

FIG. 4

An important purpose of the Profiling Component is to analyze the current state of a domain and identify specific things that are true about that domain. (Page 9, lines 17-31.) This information is then passed to the Remediation Component which provides feedback to the student. The Profiling Component analyzes the domain by asking questions about the domain's state, akin to an investigator asking questions about a case. The questions that the Profiler asks are called profiles. For example, suppose there is a task about building a campfire and the student has just thrown a match on a pile of wood,

but the fire didn't start. In order to give useful feedback to the student, a tutor would need to know things like: was the match lit?, was the wood wet?, was there kindling in the pile?, etc. These questions would be among the profiles that the Profiling Component would use to analyze the domain. The results of the analysis would then be passed off to the Remediation Component which would use this information to provide specific feedback to the student. A profile is a set of criteria that is matched against the domain. The purpose of a profile is to check whether the criteria defined by the profile is met in the domain. Using a visual editing tool, instructional designers create profiles to identify those things that are important to know about the domain for a given task. During execution of a BusSim application at the point that feedback is requested either by the student or pro-actively by the application, the set of profiles associated with the current task are evaluated to determine which ones are true. Example profiles include: Good productions strategy but wrong Break-Even Formula; Good driving record and low claims history; and Correct Cash Flow Analysis but poor Return on Investment (ROI).

A profile is composed of two types of structures: characteristics and collective characteristics. (Page 9, line 32 – page 10, line 6.) A characteristic is a conditional (the *if* half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Exemplary characteristics include: Wrong debit account in transaction 1; Perfect cost classification; At Least 1 DUI in the last 3 years; More than $4000 in claims in the last 2 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property of a single entity in the domain; thus the term atomic. Example

atomics include: The number of DUI's >= 1; ROI > 10%; and Income between $75,000 and $110,000. A collective characteristic is a conditional that uses multiple characteristics and/or other collective characteristics as its operands. Collective characteristics allow instructional designers to build richer expressions (i.e., ask more complex questions). Exemplary collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse these elements within multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile from its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 (as shown below) illustrates an insurance underwriting profile in accordance with a preferred embodiment.

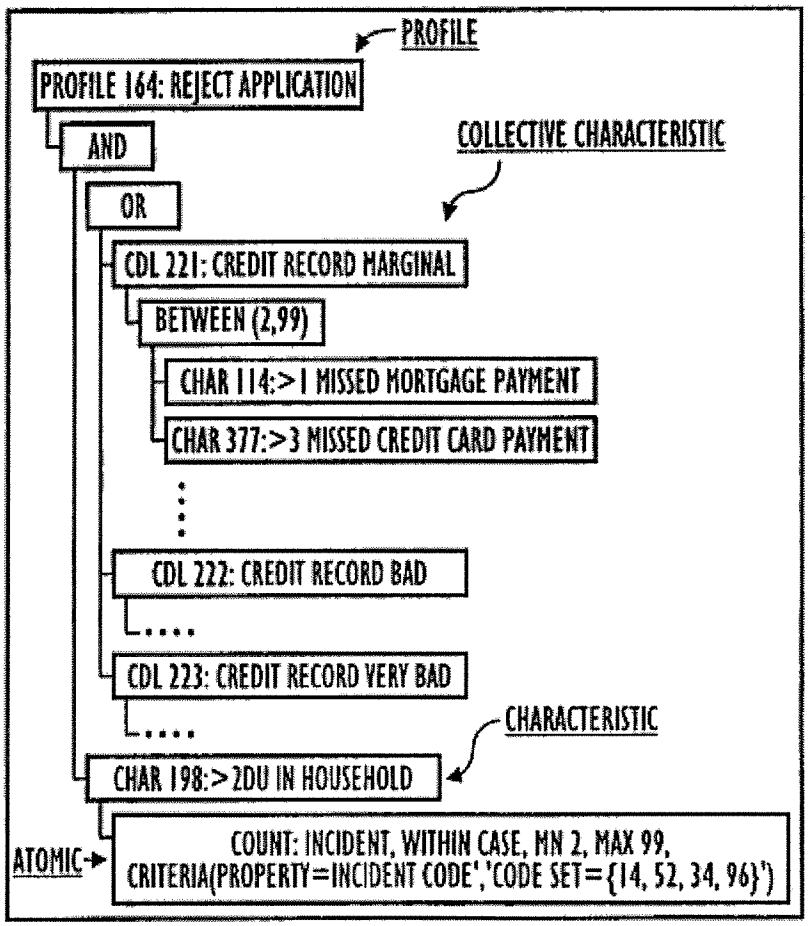
PROFILE
PROFILE 164: REJECT APPLICATION
AND
COLLECTIVE CHARACTERISTIC
OR
CDL 221: CREDIT RECORD MARGINAL
BETWEEN (2,99)
CHAR 114:>1 MISSED MORTGAGE PAYMENT
CHAR 377:>3 MISSED CREDIT CARD PAYMENT
CDL 222: CREDIT RECORD BAD
CDL 223: CREDIT RECORD VERY BAD
CHARACTERISTIC
CHAR 198:>2DU IN HOUSEHOLD
ATOMIC
COUNT: INCIDENT, WITHIN CASE, MN 2, MAX 99,
CRITERIA(PROPERTY=INCIDENT CODE','CODE SET={14, 52, 34, 96}')

FIG. 5

Description of Independent Claims

Independent claim 1 is directed to a computer-implemented method for creating a tutorial presentation. (Figure 1; Page 1, lines 30-39; Page 3, lines 1-14.) A profile is matched against a simulation domain, in which the profile includes a set of criteria to identify a desired aspect for a current simulation task. (Page 9, lines 17-31.) Information that is indicative of a goal is presented and information that motivates accomplishment of the goal is integrated in the presentation. (Figure 2; Page 3, line 32-page 4, line 4; Page 4, lines 13-18; Page 6, line 36-page 7, line 5.) Progress toward the goal is monitored, where at least one profile is true for the current simulation task from a set of profiles. (Page 9, lines 17-31.) Based on the profile, feedback is provided to a student, to further motivate accomplishment of the goal. (Page 4, lines 5-12.) The profile conjunctively uses a plurality of characteristics, where each characteristic identifies a subset of the simulation domain. (Figure 5; Page 9, line 32-page 10, line 6.) The details of the computer-implemented method and the tutorial presentation are displayed as the tutorial presentation executes, where the tutorial presentation provides a cognitive educational experience. (Figure 2; Page 3, line 32- page 4, line 4.)

Independent claim 10 is directed to an apparatus that creates a tutorial presentation. (Figure 1; Page 1, lines 30-39; Page 3, lines 1-14.) A processor with memory runs a computer program having logic to create the tutorial presentation. (Figure 1; Page 3, lines 1-23.) Logic is executed to match a profile against a simulation domain, in which the profile includes a set of criteria to identify a desired aspect for a current simulation task. (Page 9, lines 17-31.) Logic presents information that is indicative of a goal and integrates information that motivates accomplishment of the goal in the

presentation. (Figure 2; Page 3, line 32-page 4, line 4; Page 4, lines 13-18; Page 6, line 36-page 7, line 5.) Logic monitors progress toward the goal, where at least one profile is true for the current simulation task from a set of profiles. (Page 9, lines 17-31.) Based on the profile, feedback is provided to a student, to further motivate accomplishment of the goal. (Page 4, lines 5-12.) The profile conjunctively uses a plurality of characteristics, where each characteristic identifies a subset of the simulation domain. (Figure 5; Page 9, line 32-page 10, line 6.) Logic displays details of the computer-implemented method and the tutorial presentation as the tutorial presentation executes, where the tutorial presentation provides a cognitive educational experience. (Figure 2; Page 3, line 32- page 4, line 4.)

Independent claim 19 is directed a computer-readable medium for creating a tutorial presentation and having computer-executable instructions. (Figure 1; Page 1, lines 30-39; Page 3, lines 1-23.) A profile is matched against a simulation domain, in which the profile includes a set of criteria to identify a desired aspect for a current simulation task. (Page 9, lines 17-31.) Information that is indicative of a goal is presented and information that motivates accomplishment of the goal is integrated in the presentation. (Figure 2; Page 3, line 32-page 4, line 4; Page 4, lines 13-18; Page 6, line 36-page 7, line 5.) Progress toward the goal is monitored, where at least one profile is true for the current simulation task from a set of profiles. (Page 9, lines 17-31.) Based on the profile, feedback is provided to a student, to further motivate accomplishment of the goal. (Page 4, lines 5-12.) The profile conjunctively uses a plurality of characteristics, where each characteristic identifies a subset of the simulation domain. (Figure 5; Page 9, line 32-page 10, line 6.) The details of the computer-implemented method and the tutorial

presentation are displayed as the tutorial presentation executes, where the tutorial presentation provides a cognitive educational experience. (Figure 2; Page 3, line 32- page 4, line 4.)

VI. Grounds of Rejection to be Reviewed on Appeal

Claims 1, 5, 10, 14, and 19 are rejected under 35 U.S.C. §112, first paragraph as allegedly failing to comply with the enablement or written description requirement. Claims 1-21 are rejected under 25 U.S.C. 102 (b) as allegedly being anticipated by U.S. Patent No. 5,302,132 (Corder).

VII. Argument

A. Claim 1 Complies With The Written Description Requirement.

Regarding the 35 U.S.C. 112, first paragraph rejection, the Office Action alleges that the claim fails to comply with the written description requirement. The Office Action alleges that (Page 3. Emphasis added.)

> The claims(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the invention(s), at the time the application was filed, had possession of the claimed invention. These claims state that "**at least one profile uses conjunctively a plurality of characteristics**" which is not mentioned within the specification.

The specification, as originally filed, supports the above feature in such a way as to reasonably convey to one skilled in the art that the inventors, at the time of the application was filed, had possession of the claimed invention. For example, the specification discloses (page 9, line 32-page 10, line 6. Emphasis added.):

> **A profile is composed of two types of structures: characteristics and collective characteristics.** A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Example characteristics include: Wrong debit account in transaction 1; Prefect cost classification; At least 1 DUI in the last 3 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's >= 1; ROI > 10%; and income between $75,000 and $110,000. **A collective characteristic is a conditional that uses multiple characteristics and/or other collective characteristics as its operands.** Collective characteristics allow instructional designer to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense Transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse there elements with multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile form its elements, atomics can

> be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

As disclosed above, a profile may include a collective characteristic that uses multiple characteristics and other collective characteristics as its operands. While "conjunctively" is not explicitly used in the specification, the words of a claim must be given their plain meaning unless they are defined in the specification in accordance with MPEP §2111.01. For example, "conjunctive" is often defined as "joined together; combined." (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) As disclosed above, a profile may use a plurality of characteristics in a combined fashion. Thus, the specification inherently supports the feature of "at least one profile uses conjunctively a plurality of characteristics."

For at least the above reasons, the 'at least one profile uses conjunctively a plurality of characteristics' was described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claim 1 complies with the written description requirement. Thus, the rejection of claim 1 under 35 U.S.C. 112, first paragraph should be reversed.

B. Claim 10 Complies With The Written Description Requirement.

Regarding the 35 U.S.C. 112, first paragraph rejection, the Office Action alleges that the claim fails to comply with the written description requirement. The Office Action alleges that (Page 3. Emphasis added.)

> The claims(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the invention(s), at the time the application was filed, had possession of the claimed invention. These claims state that "**at least one profile uses conjunctively a plurality of characteristics**" which is not mentioned within the specification.

The specification, as originally filed, supports the above feature in such a way as to reasonably convey to one skilled in the art that the inventors, at the time of the application was filed, had possession of the claimed invention. For example, the specification discloses (page 9, line 32-page 10, line 6. Emphasis added.):

> **A profile is composed of two types of structures: characteristics and collective characteristics.** A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Example characteristics include: Wrong debit account in transaction 1; Prefect cost classification; At least 1 DUI in the last 3 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's >= 1; ROI > 10%; and income between $75,000 and $110,000. **A collective characteristic is a conditional that uses multiple characteristics and/or other collective characteristics as its operands.** Collective characteristics allow instructional designer to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense Transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse there elements with multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile form its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

As disclosed above, a profile may include a collective characteristic that uses multiple characteristics and other collective characteristics as its operands. While "conjunctively" is not explicitly used in the specification, the words of a claim must be

given their plain meaning unless they are defined in the specification in accordance with MPEP §2111.01. For example, "conjunctive" is often defined as "joined together; combined." (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) As disclosed above, a profile may use a plurality of characteristics in a combined fashion. Thus, the specification inherently supports the feature of "at least one profile uses conjunctively a plurality of characteristics."

For at least the above reasons, the 'at least one profile uses conjunctively a plurality of characteristics' was described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claim 10 complies with the written description requirement. Thus, the rejection of claim 10 under 35 U.S.C. 112, first paragraph should be reversed.

C. Claim 19 Complies With The Written Description Requirement.

Regarding the 35 U.S.C. 112, first paragraph rejection, the Office Action alleges that the claim fails to comply with the written description requirement. The Office Action alleges that (Page 3. Emphasis added.)

> The claims(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the invention(s), at the time the application was filed, had possession of the claimed invention. These claims state that "**at least one profile uses conjunctively a plurality of characteristics**" which is not mentioned within the specification.

The specification, as originally filed, supports the above feature in such a way as to reasonably convey to one skilled in the art that the inventors, at the time of the application was filed, had possession of the claimed invention. For example, the specification discloses (page 9, line 32-page 10, line 6. Emphasis added.):

> **A profile is composed of two types of structures: characteristics and collective characteristics.** A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Example characteristics include: Wrong debit account in transaction 1; Prefect cost classification; At least 1 DUI in the last 3 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's >= 1; ROI > 10%; and income between $75,000 and $110,000. **A collective characteristic is a conditional that uses multiple characteristics and/or other collective characteristics as its operands.** Collective characteristics allow instructional designer to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense Transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse there elements with multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile form its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

As disclosed above, a profile may include a collective characteristic that uses multiple characteristics and other collective characteristics as its operands. While "conjunctively" is not explicitly used in the specification, the words of a claim must be given their plain meaning unless they are defined in the specification in accordance with MPEP §2111.01. For example, "conjunctive" is often defined as "joined together; combined." (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) As disclosed above, a profile may use a plurality of characteristics in a combined fashion. Thus, the specification inherently supports the feature of "at least one profile uses conjunctively a plurality of characteristics."

For at least the above reasons, the 'at least one profile uses conjunctively a plurality of characteristics' was described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claim 19 complies with the written description requirement. Thus, the rejection of claim 10 under 35 U.S.C. 112, first paragraph should be reversed.

D. Claim 5 Complies With The Enablement Requirement.

Regarding the 35 U.S.C. 112, first paragraph rejection, the Office Action alleges that the claim fails to comply with the enablement requirement.

The Office Action alleges that (Page 3.):

> The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims have the term 'source code' in them but said term is lacking within the specification. 'Source code' could have a number of meanings and manifestations but it is not within the specification for clarification or description. The claims and/or the specification must be amended to correct this rejection.

Claim 5 contains the feature of "displaying source code of the tutorial presentation as the tutorial presentation executes." The specification discloses embodiments that utilize different programming languages. For example, the specification discloses that (Page 3, lines 15-23. Emphasis added.):

> **A preferred embodiment is written using JAVA, C, and the C++ language and utilizes object oriented programming methodology.** Object oriented programming (OOP) has become increasingly used to develop complex applications. As OOP moves toward the mainstream of software design and development, various software solutions require adaptation to make use of the benefits of OOP. A need exists for these principles of OOP to be applied to a messaging interface of an electronic messaging system such that a set of OOP classes and objects for the

> messaging interface can be provided. A simulation engine in accordance with a preferred embodiment is based on a Microsoft **Visual Basic** component developed to help design and test feedback in relation to a Microsoft **Excel** spreadsheet. These spreadsheet models are what simulate actual business functions and become a task that will be performed by a student The Simulation Engine accepts simulation inputs and calculates various outputs and notifies the system of the status of the simulation at a given time in order to obtain appropriate feedback.

The Office Action further alleges that (Page 20.):

> The term 'source code' is not within the specification and the applicant's argument does not clarify the problem. Is the 'source code' itself displayed or the resulting output of the 'source code' displayed? If the invention is a business simulation software designed for tutorial use, what benefit of displaying the 'source code' benefit a student?

Visual Basic, JAVA, C, and C++ languages are examples of computer languages in which source code are written for creating a tutorial presentation. Source code may defined as a set of instructions, written in a programming language, that must be translated to machine instructions before the program can be run on a computer. The program which finally runs on that computer is known as the object code. (Newton's Telecom Dictionary, Eleventh Edition, 1996.) Additionally, the specification discloses Visual Basic code that is involved for creating a simulation. (Page 34, line 16 – page 36, line 9.) As claimed in claims 5 and 10, source code (e.g., Visual Basic) is displayed as the tutorial presentation executes. Applicant notes that the claimed invention is for creating a tutorial presentation. As disclosed in the specification, there are different phases when creating a presentation, including the design phase, build phase, test phase, and execution phase. (Page 5, line 23-page 6, line 34; page 11, line 33-page 12, line 2.) As an example, displaying source code during the build phase is often of benefit to a developer.

The Advisory Notice further alleges (Page 2. Emphasis added.):

> **Per the specification the computer language 'C' is an 'object oriented programming' language (OOP).** The computer language *'C'* is not an OOP language. In addition, what is being displayed? Is the actual code be displayed or the results of the compiled code which would display some results or output? The term 'source code' is not mentioned at ail within the specification. Office action stands.

The specification discloses embodiments that are in JAVA, C, and C++ and that utilizes object-oriented programming methodology. Appellant respectfully disagrees that specification discloses that 'C' is an object-oriented programming language. While both JAVA and C++ are object-oriented languages, Appellant notes that object-oriented programming methodology may utilize languages (e.g., 'C') that are not considered object-oriented languages by supporting objects. For example, the object type may be represented as a C structure. The specification, for example, discloses that objects in a simulation may represent pseudo tangible things such as a lever the student can pull, a form or notepad the student fills out, a character the student interacts with in a simulated meeting. Objects may also be abstract objects such as the ROI for a particular investment or the number of times the student asked a particular question. . (Page 8, line 40 – page 9, line 8.)

Claim 5 complies with the enablement requirement. Thus, the rejection of claim 5 under 35 U.S.C. 112, first paragraph should be reversed.

E. Claim 14 Complies With The Enablement Requirement.

Regarding the 35 U.S.C. 112, first paragraph rejection, the Office Action alleges that the claim fails to comply with the enablement requirement. The Office Action alleges that (Page 3.):

> The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. These claims have the term 'source code' in them but said term

> is lacking within the specification. 'Source code' could have a number of meanings and manifestations but it is not within the specification for clarification or description. The claims and/or the specification must be amended to correct this rejection.

Claim 14 contains the feature of "logic that displays source code of the tutorial presentation as the tutorial presentation executes." The specification discloses embodiments that utilize different programming languages. For example, the specification discloses that (Page 3, lines 15-23. Emphasis added.):

> **A preferred embodiment is written using JAVA, C, and the C++ language and utilizes object oriented programming methodology.** Object oriented programming (OOP) has become increasingly used to develop complex applications. As OOP moves toward the mainstream of software design and development, various software solutions require adaptation to make use of the benefits of OOP. A need exists for these principles of OOP to be applied to a messaging interface of an electronic messaging system such that a set of OOP classes and objects for the messaging interface can be provided. A simulation engine in accordance with a preferred embodiment is based on a Microsoft **Visual Basic** component developed to help design and test feedback in relation to a Microsoft **Excel** spreadsheet. These spreadsheet models are what simulate actual business functions and become a task that will be performed by a student The Simulation Engine accepts simulation inputs and calculates various outputs and notifies the system of the status of the simulation at a given time in order to obtain appropriate feedback.

The Office Action further alleges that (Page 20.):

> The term 'source code' is not within the specification and the applicant's argument does not clarify the problem. Is the 'source code' itself displayed or the resulting output of the 'source code' displayed? If the invention is a business simulation software designed for tutorial use, what benefit of displaying the 'source code' benefit a student?

Visual Basic, JAVA, C, and C++ languages are examples of computer languages in which source code are written for creating a tutorial presentation. Source code may defined as a set of instructions, written in a programming language, that must be translated to machine instructions before the program can be run on a computer. The program which finally runs on that computer is known as the object code. (Newton's

Telecom Dictionary, Eleventh Edition, 1996.) Additionally, the specification discloses Visual Basic code that is involved for creating a simulation. (Page 34, line 16 – page 36, line 9.) As claimed in claims 5 and 10, source code (e.g., Visual Basic) is displayed as the tutorial presentation executes. Applicant notes that the claimed invention is for creating a tutorial presentation. As disclosed in the specification, there are different phases when creating a presentation, including the design phase, build phase, test phase, and execution phase. (Page 5, line 23-page 6, line 34; page 11, line 33-page 12, line 2.) As an example, displaying source code during the build phase is often of benefit to a developer.

The Advisory Notice further alleges (Page 2. Emphasis added.):

> **Per the specification the computer language 'C' is an 'object oriented programming' language (OOP).** The computer language *'C'* is not an OOP language. In addition, what is being displayed? Is the actual code be displayed or the results of the compiled code which would display some results or output? The term 'source code' is not mentioned at ail within the specification. Office action stands.

The specification discloses embodiments that are in JAVA, C, and C++ and that utilizes object-oriented programming methodology. Appellant respectfully disagrees that specification discloses that 'C' is an object-oriented programming language. While both JAVA and C++ are object-oriented languages, Appellant notes that object-oriented programming methodology may utilize languages (e.g., 'C') that are not considered object-oriented languages by supporting objects. For example, the object type may be represented as a C structure. The specification, for example, discloses that objects in a simulation may represent pseudo tangible things such as a lever the student can pull, a form or notepad the student fills out, a character the student interacts with in a simulated meeting. Objects may also be abstract objects such as the ROI for a particular investment

or the number of times the student asked a particular question. . (Page 8, line 40 – page 9, line 8.)

Claim 14 complies with the enablement requirement. Thus, the rejection of claim 14 under 35 U.S.C. 112, first paragraph should be reversed.

F. Claims 1-9 and 21 Are Not Anticipated Because Corder Does Not Does Not Teach Every Feature.

The Office Action alleges that US Patent No. 5,302,132 (Corder) teaches all of the features claimed in claims 1-9 and 21 and rejects the claims under 35 U.S.C. 102(b). However, U.S. Patent No. 5,302,132 (Corder) fails to teach or even suggest the feature of "monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile **conjunctively** using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." (Emphasis added.)

The specification discloses (page 9, line 32-page 10, line 6. Emphasis added.):

> A profile is composed of two types of structures: characteristics and collective characteristics. A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Example characteristics include: Wrong debit account in transaction 1; Prefect cost classification; At least 1 DUI in the last 3 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's >= 1; ROI > 10%; and income between $75,000 and $110,000. A collective characteristic is a conditional that uses multiple characteristics **and/or** other collective characteristics as its operands. Collective characteristics allow

> instructional designer to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense Transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse there elements with multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile form its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

As claimed and disclosed above, a profile may include a collective characteristic that uses multiple characteristics and other collective characteristics as its operands. While "conjunctively" is not explicitly used in the specification, the words of a claim must be given their plain meaning unless they are defined in the specification in accordance with MPEP §2111.01. For example, "conjunctive" is often defined as "joined together; combined." (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) The

> The Office Action alleges that Corder teaches (Pages 4-5.):
>
> ... monitoring progress toward the goal determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal (Corder, C7:35-44, Figure 5, C20:64 through C21:9; 'True' of applicant is equivalent to 'completeness' of Corder. 'Monitoring progress' of applicant is equivalent to the items in Figure 5, each item is a step towards a goal with corrective lessons need if required. 'Feedback' of applicant is equivalent to 'suggest ways to achieve improvements in performance' of Corder.), the at least one profile conjunctively, using a plurality of characteristics, each characteristic identifying a subset of the simulation domain (Corder, C4:15-35; "Plurality of characteristics' of applicant is equivalent to 'assessment' of Corder. One assessment' is for lip reading and another is for signing.); ...

Corder discloses (Column 4, lines 15-35. Emphasis added.):

> FIG. 2a is a schematic representation of a teacher computer 240 or workstation. This system configuration normally has more hardware components than the student's system. "Other Devices" 248 refers to components available to the teacher, such as touch screens, track balls, etc. FIG. 2b shows a student's computer 260. It has a component 262 to digitally record the student saying the phonograms, word, or other task objective and depicts the simplest system hardware configuration from among an almost unlimited number of possibilities. A typical networked computer lab having various hardware components which might be utilized to advantage with the method of the present invention is shown in FIG. 2c. Also shown in this figure are several hardware components which facilitate the teaching of communication skills. **For example, the video camera 2081 provides for the assessment of the lip positions during speech, or in the case of a deaf learner, for recording and evaluating the student signing the lesson objective.** The current invention is not limited to particular computers or system configurations.

The Office Action alleges that assessment is equivalent to "plurality of characteristics." Corder discloses either assessing lip positions or evaluating signing, depending whether the learner is deaf or not. Corder merely discloses using one assessment or the other assessment but not both assessments. Corder uses either uses lip positions or student signing, depending whether the student is deaf or not. Corder fails to suggest conjunctively using the plurality of assessments. Thus, Corder does not even suggest the feature of "monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain."

Corder does not teach all of the features of claims 1-9 and 21. Thus, the rejections of claim 1-9 and 21 under 35 U.S.C. 102 should be reversed.

G. Claims 10-18 Are Not Anticipated Because Corder Does Not Does Not Teach Every Feature.

The Office Action alleges that US Patent No. 5,302,132 (Corder) teaches all of the features claimed in claims 10-18 and rejects the claims under 35 U.S.C. 102(b). However, U.S. Patent No. 5,302,132 (Corder) fails to teach or even suggest the feature of "logic that monitors progress toward the goal, determines at least one profile that is true for the current simulation task from a set of profiles, and provides feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile **conjunctively** using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." (Emphasis added.)

The specification discloses (page 9, line 32-page 10, line 6. Emphasis added.):

> A profile is composed of two types of structures: characteristics and collective characteristics. A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Example characteristics include: Wrong debit account in transaction 1; Prefect cost classification; At least 1 DUI in the last 3 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's >= 1; ROI > 10%; and income between $75,000 and $110,000. A collective characteristic is a conditional that uses multiple characteristics **and/or** other collective characteristics as its operands. Collective characteristics allow instructional designer to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense Transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse there elements with multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile form its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

As disclosed above, a profile may include a collective characteristic that uses multiple characteristics and other collective characteristics as its operands. While "conjunctively" is not explicitly used in the specification, the words of a claim must be given their plain meaning unless they are defined in the specification in accordance with MPEP §2111.01. For example, "conjunctive" is often defined as "joined together; combined." (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) The

> The Office Action alleges that Corder teaches (Page 6.):
>
> ... monitoring progress toward the goal determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal (Corder, C7:35-44, Figure 5, C20:64 through C21:9; 'True' of applicant is equivalent to 'completeness' of Corder. 'Monitoring progress' of applicant is equivalent to the items in Figure 5, each item is a step towards a goal with corrective lessons need if required. 'Feedback' of applicant is equivalent to 'suggest ways to achieve improvements in performance' of Corder.), the at least one profile conjunctively, using a plurality of characteristics, each characteristic identifying a subset of the simulation domain (Corder, C4:15-35; "Plurality of characteristics' of applicant is equivalent to 'assessment' of Corder. One assessment' is for lip reading and another is for signing.); ...

Corder discloses (Column 4, lines 15-35. Emphasis added.):

> FIG. 2a is a schematic representation of a teacher computer 240 or workstation. This system configuration normally has more hardware components than the student's system. "Other Devices" 248 refers to components available to the teacher, such as touch screens, track balls, etc. FIG. 2b shows a student's computer 260. It has a component 262 to digitally record the student saying the phonograms, word, or other task objective and depicts the simplest system hardware configuration from among an almost unlimited number of possibilities. A typical networked computer lab having various hardware components which might be utilized to advantage with the method of the present invention is shown in FIG. 2c. Also shown in this figure are several hardware components which facilitate the teaching of communication skills. **For example, the video camera 2081 provides for the assessment of the lip positions during speech, or in the case of a deaf learner, for recording and evaluating the student signing the lesson objective.** The current invention is not limited to particular computers or system configurations.

The Office Action alleges that assessment is equivalent to "plurality of characteristics." Corder discloses either assessing lip positions or evaluating signing, depending whether the learner is deaf or not. Corder merely discloses using one assessment or the other assessment but not both assessments. Corder uses either uses lip positions or student signing, depending whether the student is deaf or not. Corder fails to suggest conjunctively using the plurality of assessments. Thus, Corder does not even suggest the feature of "monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain."

Corder does not teach all of the features of claims 10-18. Thus, the rejections of claims 10-18 under 35 U.S.C. 102 should be reversed.

H. Claims 19-20 Are Not Anticipated Because Corder Does Not Does Not Teach Every Feature.

The Office Action alleges that US Patent No. 5,302,132 (Corder) teaches all of the features claimed in claims 19-20 and rejects the claims under 35 U.S.C. 102(b). However, U.S. Patent No. 5,302,132 (Corder) fails to teach or even suggest the feature of "monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile **conjunctively** using a plurality of characteristics, each characteristic identifying a subset of the simulation domain." (Emphasis added.)

The specification discloses (page 9, line 32-page 10, line 6. Emphasis added.):

> A profile is composed of two types of structures: characteristics and collective characteristics. A characteristic is a conditional (the if half of a rule) that identifies a subset of the domain that is important for determining what feedback to deliver to the student. Example characteristics include: Wrong debit account in transaction 1; Prefect cost classification; At least 1 DUI in the last 3 years; and More than two at-fault accidents in 5 years. A characteristic's conditional uses one or more atomics as the operands to identify the subset of the domain that defines the characteristic. An atomic only makes reference to a single property to a single property of a single entity in the domain; thus the term atomic. Example atomics include: The number of DUI's >= 1; ROI > 10%; and income between $75,000 and $110,000. A collective characteristic is a conditional that uses multiple characteristics **and/or** other collective characteristics as its operands. Collective characteristics allow instructional designer to build richer expressions (i.e., ask more complex questions). Example collective characteristics include: Bad Household driving record; Good Credit Rating; Marginal Credit Rating; Problems with Cash for Expense Transactions; and Problems with Sources and uses of cash. Once created, designers are able to reuse there elements with multiple expressions, which significantly eases the burden of creating additional profiles. When building a profile form its elements, atomics can be used by multiple characteristics, characteristics can be used by multiple collective characteristics and profiles, and collective characteristics and profiles, and collective characteristics can be used by multiple collective characteristics and profiles. Figure 5 illustrates an insurance underwriting profile in accordance with a preferred embodiment.

As disclosed above, a profile may include a collective characteristic that uses multiple characteristics and other collective characteristics as its operands. While "conjunctively" is not explicitly used in the specification, the words of a claim must be given their plain meaning unless they are defined in the specification in accordance with MPEP §2111.01. For example, "conjunctive" is often defined as "joined together; combined." (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) The

The Office Action alleges that Corder teaches (Page 7.):

> ... monitoring progress toward the goal determining at least one profile that is true for the current simulation task from a set of profiles, and

> providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal (Corder, C7:35-44, Figure 5, C20:64 through C21:9; 'True' of applicant is equivalent to 'completeness' of Corder. 'Monitoring progress' of applicant is equivalent to the items in Figure 5, each item is a step towards a goal with corrective lessons need if required. 'Feedback' of applicant is equivalent to 'suggest ways to achieve improvements in performance' of Corder.), the at least one profile conjunctively, using a plurality of characteristics, each characteristic identifying a subset of the simulation domain (Corder, C4:15-35; "Plurality of characteristics' of applicant is equivalent to 'assessment' of Corder. One assessment' is for lip reading and another is for signing.); ...

Corder discloses (Column 4, lines 15-35. Emphasis added.):

> FIG. 2a is a schematic representation of a teacher computer 240 or workstation. This system configuration normally has more hardware components than the student's system. "Other Devices" 248 refers to components available to the teacher, such as touch screens, track balls, etc. FIG. 2b shows a student's computer 260. It has a component 262 to digitally record the student saying the phonograms, word, or other task objective and depicts the simplest system hardware configuration from among an almost unlimited number of possibilities. A typical networked computer lab having various hardware components which might be utilized to advantage with the method of the present invention is shown in FIG. 2c. Also shown in this figure are several hardware components which facilitate the teaching of communication skills. **For example, the video camera 2081 provides for the assessment of the lip positions during speech, or in the case of a deaf learner, for recording and evaluating the student signing the lesson objective.** The current invention is not limited to particular computers or system configurations.

The Office Action alleges that assessment is equivalent to "plurality of characteristics." Corder discloses either assessing lip positions or evaluating signing, depending whether the learner is deaf or not. Corder merely discloses using one assessment or the other assessment but not both assessments. Corder uses either uses lip positions or student signing, depending whether the student is deaf or not. Corder fails to suggest conjunctively using the plurality of assessments. Thus, Corder does not even suggest the feature of "monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a

student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain."

Corder does not teach all of the features of claim 19-20. Thus, the rejections of claim 19-20 under 35 U.S.C. 102 should be reversed.

I. Claim 3 Is Not Anticipated Because Corder Does Not Does Not Teach Every Feature.

The Office Action alleges that US Patent No. 5,302,132 (Corder) teaches all of the features claimed in claim 3, which depends from claim 1, and rejects the claim under 35 U.S.C. 102(b). In addition to the discussion above, Corder does not teach or even suggest the feature of "receiving and analyzing user responses using **an expert system** to determine details of the computer-implemented method to display.' (Emphasis added.)

The Office Action alleges that (Page 8.)

> Corder anticipates receiving and analyzing user responses using an expert system to determine details of the computer-implemented method to display. (Corder, C3:31 through C4:6; Corder illustrates this in the passage '...the means for generating test stimuli and receiving the responses of the student to the stimulus.. . ')

However, Corder fails to teach any thing about an expert system[1], which includes a rule-based engine utilizing a collection of rules to reach a conclusion, as disclosed in the present

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[1] One skilled in the art appreciates that an *expert system* is a sophisticated computer program consisting of three parts: 1. A stock of rules of general statements. These rules are generally based on the collective wisdom of human "experts" who are interviewed. 2. A set of particular facts. 3 Most importantly, a "logical engine" which can apply facts to

specification (e.g., page 12, line 29-page 13, line 17) executing rules (e.g., page 9, line 32 – page 10, line 6). Corder merely discloses a means for generating stimuli and receiving responses to the stimuli.

Corder does not teach all of the features of claim 3. Thus, the rejection of claim 3 under 35 U.S.C. 102 should be reversed.

J. Claim 5 Is Not Anticipated Because Corder Does Not Does Not Teach Every Feature.

The Office Action alleges that US Patent No. 5,302,132 (Corder) teaches all of the features claimed in claim 5, which depends from independent claim 1, and rejects the claim under 35 U.S.C. 102(b). In addition to the discussion above, Corder does not teach or even suggest the feature of "**displaying source code** of the tutorial presentation as the tutorial presentation executes." (Emphasis added.) The Office Action alleges that (Page 4, section 4. Emphasis added.):

> Corder anticipates displaying source code of the tutorial presentation as the presentation executes. (Corder, C5 17-27, C8:52 through C9:2; **'Displaying source code' of applicant is equivalent to the results of the 'display' of Corder**. 'Tutorial presentation' of applicant is equivalent to 'tutorial session' of Corder.)

However, Corder merely teaches displaying content (e.g., phonograms, icons, or buttons) that results from the source code and fails to even suggest displaying the source code itself.

Corder does not teach all of the features of claim 5. Thus, the rejection of claim 5 under 35 U.S.C. 102 should be reversed.

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rules to reach all the conclusions that can be drawn form them. (Newton's Telecom Dictionary, 16th Edition, February 2000, Telecom Books.)

K. Claim 12 Is Not Anticipated Because Corder Does Not Does Not Teach Every Feature.

The Office Action alleges that US Patent No. 5,302,132 (Corder) teaches all of the features claimed in claim 12 which depends from independent claim 10, and rejects the claim under 35 U.S.C. 102(b). In addition to the discussion above, Corder does not teach or even suggest the feature of "logic that receives and analyzes user responses using an **expert system** to determine details of the computer program to display." (Emphasis added.) The Office Action alleges that (Page 8.)

> Corder anticipates receiving and analyzing user responses using an expert system to determine details of the computer-implemented method to display. (Corder, C3:31 through C4:6; Corder illustrates this in the passage '...the means for generating test stimuli and receiving the responses of the student to the stimulus.. . ')

However, Corder fails to teach any thing about an expert system[2], which includes a rule-based engine utilizing a collection of rules to reach a conclusion, as disclosed in the present specification (e.g., page 12, line 29-page 13, line 17) executing rules (e.g., page 9, line 32 – page 10, line 6). Corder merely discloses a means for generating stimuli and receiving responses to the stimuli.

---

[2] One skilled in the art appreciates that an *expert system* is a sophisticated computer program consisting of three parts: 1. A stock of rules of general statements. These rules are generally based on the collective wisdom of human "experts" who are interviewed. 2. A set of particular facts. 3 Most importantly, a "logical engine" which can apply facts to rules to reach all the conclusions that can be drawn form them. (Newton's Telecom Dictionary, 16th Edition, February 2000, Telecom Books.)

Corder does not teach all of the features of claim 12. Thus, the rejection of claim 12 under 35 U.S.C. 102 should be reversed.

L. Claim 14 Is Not Anticipated Because Corder Does Not Does Not Teach Every Feature.

The Office Action alleges that US Patent No. 5,302,132 (Corder) teaches all of the features claimed in claim 14, which depends from independent claim 10, and rejects the claim under 35 U.S.C. 102(b). In addition to the discussion above, Corder does not teach or even suggest the feature of "logic that **displays source code** of the tutorial presentation as the tutorial presentation executes." (Emphasis added.) The Office Action alleges that (Page 4, section 4. Emphasis added.):

> Corder anticipates displaying source code of the tutorial presentation as the presentation executes. (Corder, C5 17-27, C8:52 through C9:2; **'Displaying source code' of applicant is equivalent to the results of the 'display' of Corder**. 'Tutorial presentation' of applicant is equivalent to 'tutorial session' of Corder.)

However, Corder merely teaches displaying content (e.g., phonograms, icons, or buttons) that results from the source code and fails to even suggest displaying the source code itself.

Corder does not teach all of the features of claim 14. Thus, the rejection of claim 14 under 35 U.S.C. 102 should be reversed.

M. Claim 21 Is Not Anticipated Because Corder Does Not Does Not Teach Every Feature.

The Office Action alleges that US Patent No. 5,302,132 (Corder) teaches all of the features claimed in claim 21, which depends from claim 1, and rejects the claim under 35 U.S.C. 102(b). However, Corder does not teach or even suggest the feature of "creating another profile that reuses at least one of the plurality of characteristics" and "providing subsequent feedback **to the student**, based on the other profile." (Emphasis added.) The Office Action alleges that (Page 10. Emphasis added.):

> Creating another profile that reuses at least one of the plurality of characteristics (Corder, C2:24-31; 'Creating another profile that reuses' of applicant is demonstrated in the following. **The fact that there are 'students' implies more that one user has access to Corder**. 'Profile' of applicant is equivalent to 'different cognitive learning styles' of Corder.); and providing subsequent feedback to the student, based on the other profile. (Corder, C6:14-20: 'Other profile' of applicant is equivalent to 'learning style capabilities and disabilities' of Corder.)

While Corder may disclose different cognitive learning styles for different students, Corder fails to even suggest providing feedback to the student based on another profile.

Corder does not teach all of the features of claim 21. Thus, the rejection of claim 21 under 35 U.S.C. 102 should be reversed.

Conclusions

The rejections of claims 1-21 contained in the Final Office Action of May 11, 2007 and the Advisory Action of July 18, 2007 should be reversed for at least the reasons recited above. Reversal of the rejections is requested.

Respectfully Submitted,

Banner & Witcoff, LTD

Date: August 28, 2007

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CLAIMS APPENDIX

1. A computer-implemented method for creating a tutorial presentation, comprising:

(a) matching a profile against a simulation domain, wherein the profile comprises a set of criteria and identifies a desired aspect for a current simulation task;

(b) presenting information indicative of a goal:

(c) integrating information that motivates accomplishment of the goal;

(d) monitoring progress toward the goal, determining at least one profile that is true for the current simulation task from a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain; and

(e) displaying details of the computer-implemented method and displaying the tutorial presentation as the tutorial presentation executes, wherein the tutorial presentation provides a cognitive educational experience.

2. The computer-implemented method for creating a tutorial presentation as recited in claim 1, including instantiating a particular feedback model based on characteristics of a target user.

3. The computer-implemented method for creating a tutorial presentation as recited in claim 1, including receiving and analyzing user responses using an expert system to determine details of the computer-implemented method to display.

4. The computer-implemented method for creating a tutorial presentation as recited in claim 1, including browsing details of an object as the tutorial presentation executes.

5. The computer-implemented method for creating a tutorial presentation as recited in claim 1, including displaying source code of the tutorial presentation as the tutorial presentation executes.

6. The computer-implemented method for creating a tutorial presentation as recited in claim 1, including modifying the tutorial presentation based on a user indicia as the tutorial presentation executes.

7. The computer-implemented method for creating a tutorial presentation as recited in claim 1, including capturing portions of the tutorial presentation in response to user indicia as the tutorial presentation executes.

8. The computer-implemented method for creating a tutorial presentation as recited in claim 1, including tailoring feedback based on user indicia as the tutorial presentation executes.

9. The computer-implemented method for creating a tutorial presentation as recited in claim 1, including presenting a tailored simulation based on user indicia as the tutorial presentation executes.

10. An apparatus that creates a tutorial presentation, comprising:

(a) a processor that runs a computer program to create the tutorial presentation, the computer program comprising of logic;

(b) a memory that stores information under control of the processor;

(c) logic that matches a profile against a simulation domain, wherein the profile comprises a set of criteria and identifies a desired aspect for a current simulation task;

(d) logic that presents information indicative of a goal;

(e) logic that integrates information that motivates accomplishment of the goal;

(f) logic that monitors progress toward the goal, determines at least one profile that is true for the current simulation task from a set of profiles, and provides feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one

profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain; and

(g) logic that displays details of the computer program and that displays the tutorial presentation as the tutorial presentation executes, wherein the tutorial presentation provides a cognitive educational experience.

11. The apparatus that creates a tutorial presentation as recited in claim 10, including logic that instantiates a particular feedback model based on characteristics of a target user.

12. The apparatus that creates a tutorial presentation as recited in claim 10, including logic that receives and analyzes user responses using an expert system to determine details of the computer program to display.

13. The apparatus that creates a tutorial presentation as recited in claim 10, including logic that browses details of an object as the tutorial presentation executes.

14. The apparatus that creates a tutorial presentation as recited in claim 10, including logic that displays source code of the tutorial presentation as the tutorial presentation executes.

15. The apparatus that creates a tutorial presentation as recited in claim 10, including logic that modifies the tutorial presentation based on user indicia as the tutorial presentation executes.

16. The apparatus that creates a tutorial presentation as recited in claim 10, including logic that captures portions of the tutorial presentation in response to user indicia as the tutorial presentation executes.

17. The apparatus that creates a tutorial presentation as recited in claim 10, including logic that tailors feedback based on user indicia as the tutorial presentation executes.

18. The apparatus that creates a tutorial presentation as recited in claim 10, including logic that presents a tailored simulation based on user indicia as the tutorial presentation executes.

19. A computer-readable medium for creating a tutorial presentation and having computer-executable instructions to perform steps comprising:

(a) matching a profile against a simulation domain, wherein the profile comprises a set of criteria and identifies a desired aspect for a current simulation task;

(b) presenting information indicative of a goal:

(c) integrating information that motivates accomplishment of the goal;

(d) monitoring progress toward the goal, determining at least one profile from that is true for the current simulation task a set of profiles, and providing feedback to a student, based on the at least one profile, that further motivates accomplishment of the goal, the at least one profile conjunctively using a plurality of characteristics, each characteristic identifying a subset of the simulation domain; and

(e) displaying details of the computer-implemented method and displaying the tutorial presentation as the tutorial presentation executes, wherein the tutorial presentation provides a cognitive educational experience.

20. The computer-readable medium of claim 19, containing further computer-executable instructions for:

(d)(i) identifying a subset of the simulation domain from at least one characteristic of the profile; and

(d)(ii) determining the feedback in accordance with the subset of the simulation domain.

21. The computer-implemented method of claim 1, further comprising:

(f) creating another profile that reuses at least one of the plurality of characteristics; and

(g) providing subsequent feedback to the student, based on the other profile.

EVIDENCE APPENDIX

-NONE-

RELATED PROCEEDINGS APPENDIX

- NONE-